Young-Kwon Park

List of Publications by Citations

503 papers	11,358 citations	49 h-index	84 g-index
520 ext. papers	14,443 ext. citations	6.1 avg, IF	6.98 L-index

#	Paper	IF	Citations
503	Production and utilization of biochar: A review. *Journal of Industrial and Engineering Chemistry*, **2016**, 40, 1-15	6.3	611
502	Comparison of biochar properties from biomass residues produced by slow pyrolysis at 500℃. *Bioresource Technology*, **2013**, 148, 196-201	11	345
501	Catalytic roles of metals and supports on hydrodeoxygenation of lignin monomer guaiacol. *Catalysis Communications*, **2012**, 17, 54-58	3.2	265
500	Characterization of cadmium removal from aqueous solution by biochar produced from a giant Miscanthus at different pyrolytic temperatures. *Bioresource Technology*, **2013**, 138, 266-70	11	243
499	Highly valuable chemicals production from catalytic upgrading of radiata pine sawdust-derived pyrolytic vapors over mesoporous MFI zeolites. *Applied Catalysis B: Environmental*, **2010**, 95, 365-373	21.8	231
498	The characteristics of bio-oil produced from the pyrolysis of three marine macroalgae. *Bioresource Technology*, **2011**, 102, 3512-20	11	208
497	Bio-oil production from fast pyrolysis of waste furniture sawdust in a fluidized bed. *Bioresource Technology*, **2010**, 101 Suppl 1, S91-6	11	199
496	Slow pyrolysis of rice straw: analysis of products properties, carbon and energy yields. *Bioresource Technology*, **2014**, 155, 63-70	11	182
495	Steam reforming of biomass gasification tar using benzene as a model compound over various Ni supported metal oxide catalysts. *Bioresource Technology*, **2010**, 101 Suppl 1, S101-3	11	156
494	Clean bio-oil production from fast pyrolysis of sewage sludge: effects of reaction conditions and metal oxide catalysts. *Bioresource Technology*, **2010**, 101 Suppl 1, S83-5	11	144
493	Effects of the operating parameters on the production of bio-oil in the fast pyrolysis of Japanese larch. *Chemical Engineering Journal*, **2008**, 143, 124-132	14.7	118
492	Catalytic pyrolysis of biomass components over mesoporous catalysts using Py-GC/MS. *Catalysis Today*, **2013**, 204, 170-178	5.3	117
491	Fast pyrolysis of rice husk under different reaction conditions. *Journal of Industrial and Engineering Chemistry*, **2010**, 16, 27-31	6.3	115
490	Characteristics of biochar produced from slow pyrolysis of Geodae-Uksae 1. *Bioresource Technology*, **2013**, 130, 345-50	11	113
489	Overview of the recent advances in lignocellulose liquefaction for producing biofuels, bio-based materials and chemicals. *Bioresource Technology*, **2019**, 279, 373-384	11	111
488	Production of phenolics and aromatics by pyrolysis of miscanthus. *Fuel*, **2012**, 97, 379-384	7.1	107
487	Catalytic Hydrodeoxygenation of Bio-oil Model Compounds over Pt/HY Catalyst. *Scientific Reports*, **2016**, 6, 28765	4.9	106

486	Influence of operation variables on fast pyrolysis of Miscanthus sinensis var. purpurascens. *Bioresource Technology*, **2010**, 101, 3672-7	11	104
485	Thermal and chemical regeneration of spent activated carbon and its adsorption property for toluene. *Chemical Engineering Journal*, **2012**, 210, 500-509	14.7	97
484	Hydrodeoxygenation of guaiacol over Pt loaded zeolitic materials. *Journal of Industrial and Engineering Chemistry*, **2016**, 37, 18-21	6.3	95
483	Strategic use of biochar for CO2 capture and sequestration. *Journal of CO2 Utilization*, **2019**, 32, 128-139	7.6	91
482	Catalytic Copyrolysis of Cellulose and Thermoplastics over HZSM-5 and HY. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 1354-1363	8.3	90
481	Pyrolysis kinetics and decomposition characteristics of pine trees. *Bioresource Technology*, **2010**, 101, 9797-802	11	90
480	Recent advances in catalytic co-pyrolysis of biomass and plastic waste for the production of petroleum-like hydrocarbons. *Bioresource Technology*, **2020**, 310, 123473	11	88
479	Removal of copper(II) in aqueous solution using pyrolytic biochars derived from red macroalga Porphyra tenera. *Journal of Industrial and Engineering Chemistry*, **2016**, 36, 314-319	6.3	87
478	Pyrolysis characteristics of Oriental white oak: Kinetic study and fast pyrolysis in a fluidized bed with an improved reaction system. *Fuel Processing Technology*, **2009**, 90, 186-195	7.2	87
477	Recent advances in the catalytic hydrodeoxygenation of bio-oil. *Korean Journal of Chemical Engineering*, **2016**, 33, 3299-3315	2.8	86
476	Catalytic co-pyrolysis of torrefied yellow poplar and high-density polyethylene using microporous HZSM-5 and mesoporous Al-MCM-41 catalysts. *Energy Conversion and Management*, **2017**, 149, 966-973	10.6	84
475	Recent progress in the thermal and catalytic conversion of lignin. *Renewable and Sustainable Energy Reviews*, **2019**, 111, 422-441	16.2	83
474	Influence of Reaction Temperature, Pretreatment, and a Char Removal System on the Production of Bio-oil from Rice Straw by Fast Pyrolysis, Using a Fluidized Bed. *Energy & Fuels*, **2005**, 19, 2179-2184	4.1	83
473	Microwave steam activation, an innovative pyrolysis approach to convert waste palm shell into highly microporous activated carbon. *Journal of Environmental Management*, **2019**, 236, 245-253	7.9	80
472	The low-temperature SCR of NO over rice straw and sewage sludge derived char. *Chemical Engineering Journal*, **2010**, 156, 321-327	14.7	78
471	Upgrading of biofuel by the catalytic deoxygenation of biomass. *Korean Journal of Chemical Engineering*, **2012**, 29, 1657-1665	2.8	71
470	Catalytic hydrodeoxygenation of 2-methoxy phenol and dibenzofuran over Pt/mesoporous zeolites. *Energy*, **2015**, 81, 33-40	7.9	68
469	Synthesis of highly stable mesoporous aluminosilicates from commercially available zeolites and their application to the pyrolysis of woody biomass. *Catalysis Today*, **2008**, 132, 68-74	5.3	65

468	In-situ catalytic pyrolysis of lignin in a bench-scale fixed bed pyrolyzer. *Journal of Industrial and Engineering Chemistry*, **2017**, 54, 447-453	6.3	63
467	Engineering pyrolysis biochar via single-step microwave steam activation for hazardous landfill leachate treatment. *Journal of Hazardous Materials*, **2020**, 390, 121649	12.8	63
466	The synthesis and coating process of TiO2 nanoparticles using CVD process. *Powder Technology*, **2011**, 214, 64-68	5.2	61
465	Catalytic Vapor Cracking for Improvement of Bio-Oil Quality. *Catalysis Surveys From Asia*, **2011**, 15, 161-180	2.8	59
464	Catalytic pyrolysis of lignin using a two-stage fixed bed reactor comprised of in-situ natural zeolite and ex-situ HZSM-5. *Journal of Analytical and Applied Pyrolysis*, **2016**, 122, 282-288	6	59
463	Removal characteristics of copper by marine macro-algae-derived chars. *Chemical Engineering Journal*, **2013**, 217, 205-211	14.7	58
462	Recent advances in volatile organic compounds abatement by catalysis and catalytic hybrid processes: A critical review. *Science of the Total Environment*, **2020**, 719, 137405	10.2	57
461	Co-processing of oil palm waste and waste oil via microwave co-torrefaction: A waste reduction approach for producing solid fuel product with improved properties. *Chemical Engineering Research and Design*, **2019**, 128, 30-35	5.5	56
460	Production of aromatic hydrocarbons via catalytic co-pyrolysis of torrefied cellulose and polypropylene. *Energy Conversion and Management*, **2016**, 129, 81-88	10.6	53
459	Upgrading of bio-oil derived from biomass constituents over hierarchical unilamellar mesoporous MFI nanosheets. *Catalysis Today*, **2014**, 232, 119-126	5.3	53
458	Catalytic upgrading of oil fractions separated from food waste leachate. *Bioresource Technology*, **2011**, 102, 3952-7	11	52
457	Efficient depolymerization of lignin in supercritical ethanol by a combination of metal and base catalysts. *Journal of Industrial and Engineering Chemistry*, **2018**, 57, 45-54	6.3	52
456	Pyrolysis and catalytic upgrading of Citrus unshiu peel. *Bioresource Technology*, **2015**, 194, 312-9	11	50
455	Microwave pyrolysis valorization of used baby diaper. *Chemosphere*, **2019**, 230, 294-302	8.4	49
454	Bench scale catalytic fast pyrolysis of empty fruit bunches over low cost catalysts and HZSM-5 using a fixed bed reactor. *Journal of Cleaner Production*, **2018**, 176, 298-303	10.3	49
453	In-situ and ex-situ catalytic pyrolysis/co-pyrolysis of empty fruit bunches using mesostructured aluminosilicate catalysts. *Chemical Engineering Journal*, **2019**, 366, 330-338	14.7	48
452	Property and performance of red mud-based catalysts for the complete oxidation of volatile organic compounds. *Journal of Hazardous Materials*, **2015**, 300, 104-113	12.8	48
451	Ex-situ catalytic pyrolysis of citrus fruit peels over mesoporous MFI and Al-MCM-41. *Energy Conversion and Management*, **2016**, 125, 277-289	10.6	48

450	Property of a highly active bimetallic catalyst based on a supported manganese oxide for the complete oxidation of toluene. *Powder Technology*, **2014**, 266, 292-298	5.2	48
449	Effect of pore structure of amine-functionalized mesoporous silica-supported rhodium catalysts on 1-octene hydroformylation. *Microporous and Mesoporous Materials*, **2009**, 123, 289-297	5.3	48
448	Enhancement of C O bond cleavage to afford aromatics in the hydrodeoxygenation of anisole over ruthenium-supporting mesoporous metal oxides. *Applied Catalysis A: General*, **2017**, 544, 84-93	5.1	47
447	Comparison of removal ability of indoor formaldehyde over different materials functionalized with various amine groups. *Journal of Industrial and Engineering Chemistry*, **2011**, 17, 1-5	6.3	47
446	Pyrolysis reaction characteristics of Korean pine (Pinus Koraiensis) nut shell. *Journal of Analytical and Applied Pyrolysis*, **2014**, 110, 435-441	6	45
445	Bioelectrochemical systems for a circular bioeconomy. *Bioresource Technology*, **2020**, 300, 122748	11	45
444	Investigation into the lignin decomposition mechanism by analysis of the pyrolysis product of Pinus radiata. *Bioresource Technology*, **2016**, 219, 371-377	11	45
443	Overview of biochar production from preservative-treated wood with detailed analysis of biochar characteristics, heavy metals behaviors, and their ecotoxicity. *Journal of Hazardous Materials*, **2020**, 384, 121356	12.8	45
442	In-situ catalytic copyrolysis of cellulose and polypropylene over desilicated ZSM-5. *Catalysis Today*, **2017**, 293-294, 151-158	5.3	44
441	Analytical pyrolysis of waste paper laminated phenolic-printed circuit board (PLP-PCB). *Journal of Analytical and Applied Pyrolysis*, **2015**, 115, 87-95	6	44
440	Catalytic conversion of Laminaria japonica over microporous zeolites. *Energy*, **2014**, 66, 2-6	7.9	44
439	Effects of operation conditions on pyrolysis characteristics of agricultural residues. *Renewable Energy*, **2012**, 42, 125-130	8.1	44
438	Valorization of underutilized waste biomass from invasive species to produce biochar for energy and other value-added applications. *Environmental Research*, **2020**, 186, 109596	7.9	43
437	Rapid degradation of methyl orange using hybrid advanced oxidation process and its synergistic effect. *Journal of Industrial and Engineering Chemistry*, **2016**, 35, 205-210	6.3	41
436	Upgrading of pyrolysis bio-oil using WO3/ZrO2 and Amberlyst catalysts: Evaluation of acid number and viscosity. *Korean Journal of Chemical Engineering*, **2017**, 34, 2180-2187	2.8	41
435	Catalytic pyrolysis of lignin for the production of aromatic hydrocarbons: Effect of magnesium oxide catalyst. *Energy*, **2019**, 179, 669-675	7.9	38
434	Mild hydrodeoxygenation of phenolic lignin model compounds over a FeReOx/ZrO2 catalyst: zirconia and rhenium oxide as efficient dehydration promoters. *Green Chemistry*, **2018**, 20, 1472-1483	10	38
433	Benzene oxidation with ozone over MnOx/SBA-15 catalysts. *Catalysis Today*, **2013**, 204, 108-113	5.3	38

432	Facile synthesis of iron-ruthenium bimetallic oxide nanoparticles on carbon nanotube composites by liquid phase plasma method for supercapacitor. *Korean Journal of Chemical Engineering*, **2017**, 34, 2993-2998	2.8	38
431	Low temperature selective catalytic reduction of NO with NH3 over Mn supported on Ce0.65Zr0.35O2 prepared by supercritical method: Effect of Mn precursors on NO reduction. *Catalysis Today*, **2012**, 185, 290-295	5.3	38
430	Recent advances in the catalytic pyrolysis of microalgae. *Catalysis Today*, **2020**, 355, 263-271	5.3	38
429	Stabilization of bio-oil over a low cost dolomite catalyst. *Korean Journal of Chemical Engineering*, **2018**, 35, 922-925	2.8	36
428	Removal of Cu(2+) by biochars derived from green macroalgae. *Environmental Science and Pollution Research*, **2016**, 23, 985-94	5.1	35
427	In-situ catalytic co-pyrolysis of yellow poplar and high-density polyethylene over mesoporous catalysts. *Energy Conversion and Management*, **2017**, 151, 116-122	10.6	35
426	Copyrolysis of block polypropylene with waste wood chip. *Korean Journal of Chemical Engineering*, **2011**, 28, 497-501	2.8	35
425	Application of hierarchical MFI zeolite for the catalytic pyrolysis of Japanese larch. *Journal of Nanoscience and Nanotechnology*, **2010**, 10, 355-9	1.3	35
424	Hydrocarbon synthesis through CO2 hydrogenation over CuZnOZrO2/zeolite hybrid catalysts. *Catalysis Today*, **1998**, 44, 165-173	5.3	35
423	Pyrolysis of polypropylene over mesoporous MCM-48 material. *Journal of Physics and Chemistry of Solids*, **2008**, 69, 1125-1128	3.9	35
422	Influence of reaction conditions on bio-oil production from pyrolysis of construction waste wood. *Renewable Energy*, **2014**, 65, 41-48	8.1	34
421	Catalytic co-pyrolysis of biomass carbohydrates with LLDPE over Al-SBA-15 and mesoporous ZSM-5. *Catalysis Today*, **2017**, 298, 46-52	5.3	34
420	Removal of Cu(II)-ion over amine-functionalized mesoporous silica materials. *Journal of Industrial and Engineering Chemistry*, **2011**, 17, 504-509	6.3	34
419	Synthesis of anionic multichain type surfactant and its effect on methane gas hydrate formation. *Journal of Industrial and Engineering Chemistry*, **2011**, 17, 120-124	6.3	34
418	Synthesis of different biofuels from livestock waste materials and their potential as sustainable feedstocks – A review. *Energy Conversion and Management*, **2021**, 236, 114038	10.6	34
417	Ex situ catalytic upgrading of lignocellulosic biomass components over vanadium contained H-MCM-41 catalysts. *Catalysis Today*, **2016**, 265, 184-191	5.3	33
416	Catalytic pyrolysis of mandarin residue from the mandarin juice processing industry. *Bioresource Technology*, **2013**, 136, 431-6	11	33
415	Catalytic conversion of particle board over microporous catalysts. *Renewable Energy*, **2013**, 54, 105-110	8.1	33

414	Analytical pyrolysis properties of waste medium-density fiberboard and particle board. *Journal of Industrial and Engineering Chemistry*, **2015**, 32, 345-352	6.3	33
413	Catalytic Pyrolysis of Polystyrene over Steel Slag under CO Environment. *Journal of Hazardous Materials*, **2020**, 395, 122576	12.8	33
412	Valorization of municipal wastes using co-pyrolysis for green energy production, energy security, and environmental sustainability: A review. *Chemical Engineering Journal*, **2021**, 421, 129749	14.7	33
411	Catalytic co-pyrolysis of yellow poplar wood and polyethylene terephthalate over two stage calcium oxide-ZSM-5. *Applied Energy*, **2019**, 250, 1706-1718	10.7	32
410	Non-Isothermal Pyrolysis of Citrus Unshiu Peel. *Bioenergy Research*, **2015**, 8, 431-439	3.1	32
409	Catalytic hydrodeoxygenation of crude bio-oil in supercritical methanol using supported nickel catalysts. *Renewable Energy*, **2019**, 144, 159-166	8.1	32
408	Carbon dioxide-cofeeding pyrolysis of pine sawdust over nickle-based catalyst for hydrogen production. *Energy Conversion and Management*, **2019**, 201, 112140	10.6	32
407	Indoor formaldehyde removal over CMK-3. *Nanoscale Research Letters*, **2012**, 7, 7	5	32
406	Catalytic pyrolysis of Japanese larch using spent HZSM-5. *Korean Journal of Chemical Engineering*, **2010**, 27, 73-75	2.8	32
405	Pyrolysis kinetics and product properties of softwoods, hardwoods, and the nut shell of softwood. *Korean Journal of Chemical Engineering*, **2016**, 33, 2350-2358	2.8	31
404	Catalytic fast pyrolysis of wood plastic composite over microporous zeolites. *Chemical Engineering Journal*, **2019**, 377, 119742	14.7	31
403	Enhancement of aromatics from catalytic pyrolysis of yellow poplar: Role of hydrogen and methane decomposition. *Bioresource Technology*, **2020**, 315, 123835	11	31
402	Enhanced stability of bio-oil and diesel fuel emulsion using Span 80 and Tween 60 emulsifiers. *Journal of Environmental Management*, **2019**, 231, 694-700	7.9	31
401	Insight into the effect of metal and support for mild hydrodeoxygenation of lignin-derived phenolics to BTX aromatics. *Chemical Engineering Journal*, **2019**, 377, 120121	14.7	31
400	Catalytic co-pyrolysis of cellulose and linear low-density polyethylene over MgO-impregnated catalysts with different acid-base properties. *Chemical Engineering Journal*, **2019**, 373, 375-381	14.7	30
399	Synthesis of manganese oxide/activated carbon composites for supercapacitor application using a liquid phase plasma reduction system. *International Journal of Hydrogen Energy*, **2015**, 40, 754-759	6.7	30
398	Photocatalytic reactions of 2,4-dichlorophenoxyacetic acid using a microwave-assisted photocatalysis system. *Chemical Engineering Journal*, **2015**, 278, 259-264	14.7	30
397	Co-feeding effect of waste plastic films on the catalytic pyrolysis of Quercus variabilis over microporous HZSM-5 and HY catalysts. *Chemical Engineering Journal*, **2019**, 378, 122151	14.7	30

396	Catalytic pyrolysis of waste rice husk over mesoporous materials. *Nanoscale Research Letters*, **2012**, 7, 18	5	30
395	Effect of calcination temperature on the oxidation of benzene with ozone at low temperature over mesoporous □Mn2O3. *Powder Technology*, **2011**, 214, 458-462	5.2	30
394	Pyrolysis properties and kinetics of mandarin peel. *Korean Journal of Chemical Engineering*, **2011**, 28, 2012-2016	2.8	30
393	Catalytic pyrolysis of wood polymer composites over hierarchical mesoporous zeolites. *Energy Conversion and Management*, **2019**, 195, 727-737	10.6	29
392	Catalytic fast pyrolysis of waste pepper stems over HZSM-5. *Renewable Energy*, **2015**, 79, 20-27	8.1	29
391	Wild reed of Suncheon Bay: Potential bio-energy source. *Renewable Energy*, **2012**, 42, 168-172	8.1	29
390	Synthesis of nickel/biochar composite from pyrolysis of Microcystis aeruginosa and its practical use for syngas production. *Bioresource Technology*, **2020**, 300, 122712	11	29
389	Microalgae and ammonia: A review on inter-relationship. *Fuel*, **2021**, 303, 121303	7.1	29
388	Titanium dioxide modification with cobalt oxide nanoparticles for photocatalysis. *Journal of Industrial and Engineering Chemistry*, **2015**, 32, 259-263	6.3	28
387	Catalytic ozonation of toluene using Mn-M bimetallic HZSM-5 (M: Fe, Cu, Ru, Ag) catalysts at room temperature. *Journal of Hazardous Materials*, **2020**, 397, 122577	12.8	28
386	Suppressed char agglomeration by rotary kiln reactor with alumina ball during the pyrolysis of Kraft lignin. *Journal of Industrial and Engineering Chemistry*, **2018**, 66, 72-77	6.3	28
385	Catalytic fast pyrolysis of lignin over mesoporous Y zeolite using Py-GC/MS. *Journal of Nanoscience and Nanotechnology*, **2013**, 13, 2640-6	1.3	28
384	Pyrolysis Reaction Pathways of Waste Epoxy-Printed Circuit Board. *Environmental Engineering Science*, **2013**, 30, 706-712	2	28
383	Thermal degradation of plywood with block polypropylene in TG and batch reactor system. *Journal of Industrial and Engineering Chemistry*, **2011**, 17, 549-553	6.3	28
382	Sawdust pyrolysis from the furniture industry in an auger pyrolysis reactor system for biochar and bio-oil production. *Energy Conversion and Management*, **2020**, 226, 113502	10.6	28
381	Removal of toluene using ozone at room temperature over mesoporous Mn/AlO catalysts. *Environmental Research*, **2019**, 172, 649-657	7.9	27
380	Catalytic copyrolysis of torrefied cork oak and high density polyethylene over a mesoporous HY catalyst. *Catalysis Today*, **2018**, 307, 301-307	5.3	27
379	Selective oxidation of refractory sulfur compounds for the production of low sulfur transportation fuel. *Korean Journal of Chemical Engineering*, **2013**, 30, 509-517	2.8	27

378	Catalytic hydropyrolysis of lignin: Suppression of coke formation in mild hydrodeoxygenation of lignin-derived phenolics. *Chemical Engineering Journal*, **2020**, 386, 121348	14.7	27
377	Production of value-added aromatics from wasted COVID-19 mask via catalytic pyrolysis. *Environmental Pollution*, **2021**, 283, 117060	9.3	27
376	Recent application of biochar on the catalytic biorefinery and environmental processes. *Chinese Chemical Letters*, **2019**, 30, 2147-2150	8.1	26
375	Oligomerization and isomerization of dicyclopentadiene over mesoporous materials produced from zeolite beta. *Catalysis Today*, **2014**, 232, 69-74	5.3	26
374	Preparation and Characterization of Copper Nanoparticles via the Liquid Phase Plasma Method. *Current Nanoscience*, **2014**, 10, 7-10	1.4	26
373	NH3 selective catalytic reduction (SCR) of nitrogen oxides (NO x) over activated sewage sludge char. *Korean Journal of Chemical Engineering*, **2011**, 28, 106-113	2.8	26
372	Bio-oil upgrading through hydrogen transfer reactions in supercritical solvents. *Chemical Engineering Journal*, **2021**, 404, 126527	14.7	26
371	Using CO as an Oxidant in the Catalytic Pyrolysis of Peat Moss from the North Polar Region. *Environmental Science & Technology*, **2020**, 54, 6329-6343	10.3	25
370	Selective hydroisomerization of n-dodecane over platinum supported on SAPO-11. *Journal of Industrial and Engineering Chemistry*, **2014**, 20, 775-780	6.3	25
369	Biohydrogen production from catalytic conversion of food waste via steam and air gasification using eggshell- and homo-type Ni/AlO catalysts. *Bioresource Technology*, **2021**, 320, 124313	11	25
368	Catalytic co-pyrolysis of epoxy-printed circuit board and plastics over HZSM-5 and HY. *Journal of Cleaner Production*, **2017**, 168, 366-374	10.3	24
367	Direct coating of V2O5/TiO2 nanoparticles onto glass beads by chemical vapor deposition. *Powder Technology*, **2012**, 231, 135-140	5.2	24
366	Selective synthesis of C3□4 hydrocarbons through carbon dioxide hydrogenation on hybrid catalysts composed of a methanol synthesis catalyst and SAPO. *Applied Catalysis A: General*, **1995**, 124, 91-106	5.1	24
365	Catalytic fast co-pyrolysis of organosolv lignin and polypropylene over in-situ red mud and ex-situ HZSM-5 in two-step catalytic micro reactor. *Applied Surface Science*, **2020**, 511, 145521	6.7	24
364	Bioenergy potential and thermochemical characterization of lignocellulosic biomass residues available in Pakistan. *Korean Journal of Chemical Engineering*, **2020**, 37, 1899-1906	2.8	24
363	Catalytic hydrodeoxygenation of Geodae-Uksae pyrolysis oil over Ni/desilicated HZSM-5. *Journal of Cleaner Production*, **2018**, 174, 763-770	10.3	24
362	Thermolysis of crude oil sludge using CO2 as reactive gas medium. *Energy Conversion and Management*, **2019**, 186, 393-400	10.6	23
361	An aptamer cocktail-functionalized photocatalyst with enhanced antibacterial efficiency towards target bacteria. *Journal of Hazardous Materials*, **2016**, 318, 247-254	12.8	23

360	Catalytic co-pyrolysis of polypropylene and Laminaria japonica over zeolitic materials. *International Journal of Hydrogen Energy*, **2017**, 42, 18434-18441	6.7	23
359	Catalytic degradation of polyethylene over SBA-16. *Korean Journal of Chemical Engineering*, **2010**, 27, 1446-1451	2.8	23
358	Debrominated high quality oil production by the two-step catalytic pyrolysis of phenolic printed circuit boards (PPCB) using natural clays and HY. *Journal of Hazardous Materials*, **2019**, 367, 50-58	12.8	23
357	Continuous pyrolysis of organosolv lignin and application of biochar on gasification of high density polyethylene. *Applied Energy*, **2019**, 255, 113801	10.7	22
356	Production of biofuels from pine needle via catalytic fast pyrolysis over HBeta. *Korean Journal of Chemical Engineering*, **2020**, 37, 493-496	2.8	22
355	Synthesis of butenes through 2-butanol dehydration over mesoporous materials produced from ferrierite. *Catalysis Today*, **2012**, 185, 191-197	5.3	22
354	Catalytic pyrolysis of Laminaria japonica over nanoporous catalysts using Py-GC/MS. *Nanoscale Research Letters*, **2011**, 6, 500	5	22
353	Regeneration of field-spent activated carbon catalysts for low-temperature selective catalytic reduction of NOx with NH3. *Chemical Engineering Journal*, **2011**, 174, 242-248	14.7	22
352	In-situ hydrogenation of bio-oil/bio-oil phenolic compounds with secondary alcohols over a synthesized mesoporous Ni/CeO2 catalyst. *Chemical Engineering Journal*, **2020**, 382, 122912	14.7	22
351	Recycling of red mud as a catalyst for complete oxidation of benzene. *Journal of Industrial and Engineering Chemistry*, **2018**, 60, 259-267	6.3	22
350	Enhancement of Hydrogen Evolution from Water Photocatalysis Using Liquid Phase Plasma on Metal Oxide-Loaded Photocatalysts. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 3659-3666	8.3	21
349	Catalytic fast pyrolysis of Geodae-Uksae 1 over zeolites. *Energy*, **2015**, 81, 41-46	7.9	21
348	Synthesis of nanoporous material from zeolite USY and catalytic application to bio-oil conversion. *Journal of Nanoscience and Nanotechnology*, **2008**, 8, 5439-44	1.3	21
347	Selective Synthesis of 1-butene through Positional Isomerisation of 2-butene over Mesoporous Silica MCM-41. *Catalysis Letters*, **2007**, 119, 179-184	2.8	21
346	Characteristics of hydrogen production by photocatalytic water splitting using liquid phase plasma over Ag-doped TiO photocatalysts. *Environmental Research*, **2020**, 188, 109630	7.9	21
345	Copper promoted Co/MgO: A stable and efficient catalyst for glycerol steam reforming. *International Journal of Hydrogen Energy*, **2021**, 46, 18073-18084	6.7	21
344	Preparation of egg-shell-type Ni/Ru bimetal alumina pellet catalysts: Steam methane reforming for hydrogen production. *International Journal of Hydrogen Energy*, **2017**, 42, 18350-18357	6.7	20
343	Effective use of aluminum-plastic laminate as a feedstock for catalytic pyrolysis over micro and mesoporous catalysts. *Journal of Cleaner Production*, **2019**, 229, 1093-1101	10.3	20

342	Biodiesel synthesis from fish waste via thermally-induced transesterification using clay as porous material. *Journal of Hazardous Materials*, **2019**, 371, 27-32	12.8	20
341	Pyrolysis kinetic analysis of poly(methyl methacrylate) using evolved gas analysis-mass spectrometry. *Korean Journal of Chemical Engineering*, **2017**, 34, 1214-1221	2.8	20
340	Preparation of mesoporous V2O5/TiO2 via spray pyrolysis and its application to the catalytic conversion of 1, 2-dichlorobenzene. *Journal of Industrial and Engineering Chemistry*, **2011**, 17, 144-148	6.3	20
339	Thermal pyrolysis of fresh and waste fishing nets. *Waste Management*, **2005**, 25, 811-7	8.6	20
338	Pd/C catalyzed transfer hydrogenation of pyrolysis oil using 2-propanol as hydrogen source. *Chemical Engineering Journal*, **2019**, 377, 119986	14.7	20
337	Valorization of sewage sludge via non-catalytic transesterification. *Environment International*, **2019**, 131, 105035	12.9	19
336	Catalytic ozone oxidation of benzene at low temperature over MnOx/Al-SBA-16 catalyst. *Nanoscale Research Letters*, **2012**, 7, 14	5	19
335	Production of biohydrogen by aqueous phase reforming of polyols over platinum catalysts supported on three-dimensionally bimodal mesoporous carbon. *ChemSusChem*, **2012**, 5, 629-33	8.3	19
334	A new biorefinery platform for producing (C) bioalcohols through the biological/chemical hybridization process. *Bioresource Technology*, **2020**, 311, 123568	11	19
333	Chemical recycling of plastic waste via thermocatalytic routes. *Journal of Cleaner Production*, **2021**, 321, 128989	10.3	19
332	Photo-catalytic destruction of ethylene using microwave discharge electrodeless lamp. *Korean Journal of Chemical Engineering*, **2015**, 32, 1188-1193	2.8	18
331	CO-cofed catalytic pyrolysis of tea waste over Ni/SiO for the enhanced formation of syngas. *Journal of Hazardous Materials*, **2020**, 396, 122637	12.8	18
330	Effect of methane co-feeding on product selectivity of catalytic pyrolysis of biomass. *Catalysis Today*, **2018**, 303, 200-206	5.3	18
329	Pyrolysis and co-pyrolysis of Laminaria japonica and polypropylene over mesoporous Al-SBA-15 catalyst. *Nanoscale Research Letters*, **2014**, 9, 376	5	18
328	The pyrolysis of waste mandarin residue using thermogravimetric analysis and a batch reactor. *Korean Journal of Chemical Engineering*, **2011**, 28, 1867-1872	2.8	18
327	MoO3/SiO2 catalysts for double bond migration of 2-butene. *Journal of Industrial and Engineering Chemistry*, **2011**, 17, 186-190	6.3	18
326	Robust numerical simulation of pressure swing adsorption process with strong adsorbate CO2. *Chemical Engineering Science*, **2004**, 59, 2715-2725	4.4	18
325	Acute Toxicity and Tissue Distribution of Cerium Oxide Nanoparticles by a Single Oral Administration in Rats. *Toxicological Research*, **2009**, 25, 79-84	3.7	18

324	Pyrolysis of solid waste residues from Lemon Myrtle essential oils extraction for bio-oil production. *Bioresource Technology*, **2020**, 318, 123913	11	18
323	CO-mediated chicken manure biochar manipulation for biodiesel production. *Environmental Research*, **2019**, 171, 348-355	7.9	17
322	Hydrodeoxygenation of Guaiacol Over Pt/Al-SBA-15 Catalysts. *Journal of Nanoscience and Nanotechnology*, **2015**, 15, 527-31	1.3	17
321	Effect of surfactant, HCl and NH3 treatments on the regeneration of waste activated carbon used in selective catalytic reduction unit. *Journal of Industrial and Engineering Chemistry*, **2015**, 32, 109-112	6.3	17
320	Incorporation of solar-thermal energy into a gasification process to co-produce bio-fertilizer and power. *Environmental Pollution*, **2020**, 266, 115103	9.3	17
319	Analytical pyrolysis reaction characteristics of Porphyra tenera. *Algal Research*, **2018**, 32, 60-69	5	17
318	The removal of low concentration formaldehyde over sewage sludge char treated using various methods. *Korean Journal of Chemical Engineering*, **2011**, 28, 1556-1560	2.8	17
317	Catalytic Pyrolysis of Polyethylene and Polypropylene over Desilicated Beta and Al-MSU-F. *Catalysts*, **2018**, 8, 501	4	17
316	Synthesis of cobalt oxide-manganese oxide on activated carbon electrodes for electrochemical capacitor application using a liquid phase plasma method. *International Journal of Hydrogen Energy*, **2016**, 41, 7582-7589	6.7	16
315	Catalytic pyrolysis of swine manure using CO and steel slag. *Environment International*, **2019**, 133, 105204	12.9	16
314	Conversion of kraft lignin over hierarchical MFI zeolite. *Journal of Nanoscience and Nanotechnology*, **2014**, 14, 2414-8	1.3	16
313	Novel hybrid technology for VOC control using an electron beam and catalyst. *Research on Chemical Intermediates*, **2008**, 34, 863-870	2.8	16
312	Linear low-density polyethylene gasification over highly active Ni/CeO2-ZrO2 catalyst for enhanced hydrogen generation. *Journal of Industrial and Engineering Chemistry*, **2021**, 94, 336-342	6.3	16
311	Functional use of CO2 for environmentally benign production of hydrogen through catalytic pyrolysis of polymeric waste. *Chemical Engineering Journal*, **2020**, 399, 125889	14.7	15
310	Effects of calcination and support on supported manganese catalysts for the catalytic oxidation of toluene as a model of VOCs. *Research on Chemical Intermediates*, **2016**, 42, 185-199	2.8	15
309	Hydroisomerization of n-dodecane over Pt/Y zeolites with different acid characteristics. *Chemical Engineering Journal*, **2013**, 232, 111-117	14.7	15
308	One step simultaneous synthesis of modified-CVD-made V2O5/TiO2 nanocomposite particles. *Ceramics International*, **2012**, 38, 2613-2618	5.1	15
307	Adsorptive removal of atmospheric pollutants over Pyropia tenera chars. *Carbon Letters*, **2016**, 19, 79-88	2.3	15

306	Recent advances of thermochemical conversion processes for biorefinery. *Bioresource Technology*, **2022**, 343, 126109	11	15
305	CO2-cofeeding catalytic pyrolysis of macadamia nutshell. *Journal of CO2 Utilization*, **2020**, 37, 97-105	7.6	15
304	Degradation of dimethyl phthalate using a liquid phase plasma process with TiO photocatalysts. *Environmental Research*, **2019**, 169, 256-260	7.9	15
303	Effect of zeolite acidity and structure on ozone oxidation of toluene using Ru-Mn loaded zeolites at ambient temperature. *Journal of Hazardous Materials*, **2021**, 403, 123934	12.8	15
302	Review on the progress in emission control technologies for the abatement of CO2, SOx and NOx from fuel combustion. *Journal of Environmental Chemical Engineering*, **2021**, 9, 106064	6.8	15
301	Valorization of alum sludge via a pyrolysis platform using CO as reactive gas medium. *Environment International*, **2019**, 132, 105037	12.9	14
300	NH3-induced removal of NOx from a flue gas stream by silent discharge ozone generation in a double reactor system. *Korean Journal of Chemical Engineering*, **2019**, 36, 1291-1297	2.8	14
299	High-quality and phenolic monomer-rich bio-oil production from lignin in supercritical ethanol over synergistic Ru and Mg-Zr-oxide catalysts. *Chemical Engineering Journal*, **2020**, 396, 125175	14.7	14
298	Synergistic effects of CO2 on ex situ catalytic pyrolysis of lignocellulosic biomass over a Ni/SiO2 catalyst. *Journal of CO2 Utilization*, **2020**, 39, 101182	7.6	14
297	CO2-Mediated catalytic pyrolysis of rice straw for syngas production and power generation. *Energy Conversion and Management*, **2020**, 220, 113057	10.6	14
296	Non-isothermal pyrolysis properties of Laminaria japonica. *Journal of Analytical and Applied Pyrolysis*, **2018**, 130, 277-284	6	14
295	Catalytic pyrolysis of oilsand bitumen over nanoporous catalysts. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 759-62	1.3	14
294	Applications of Modified Biochar-Based Materials for the Removal of Environment Pollutants: A Mini Review. *Sustainability*, **2020**, 12, 6112	3.6	14
293	Production of bio-oil with reduced polycyclic aromatic hydrocarbons via continuous pyrolysis of biobutanol process derived waste lignin. *Journal of Hazardous Materials*, **2020**, 384, 121231	12.8	14
292	Mini review on H2 production from electrochemical water splitting according to special nanostructured morphology of electrocatalysts. *Fuel*, **2022**, 308, 122048	7.1	14
291	Energy, Exergy, and Sustainability Analyses of the Agricultural Sector in Bangladesh. *Sustainability*, **2020**, 12, 4447	3.6	13
290	Catalytic pyrolysis of cow manure over a Ni/SiO2 catalyst using CO2 as a reaction medium. *Energy*, **2020**, 195, 117077	7.9	13
289	Catalytic oxidation of benzene with ozone over nanoporous Mn/MCM-48 catalyst. *Journal of Nanoscience and Nanotechnology*, **2012**, 12, 5942-6	1.3	13

288	Butanol Dehydration over VOx/TiO2/MCM-41 Catalysts Prepared via Liquid Phase Atomic Layer Deposition. *Materials*, **2013**, 6, 1718-1729	3.5	13
287	Development of hierarchically porous LaVO4 for efficient visible-light-driven photocatalytic desulfurization of diesel. *Chemical Engineering Journal*, **2021**, 420, 130529	14.7	13
286	Catalytic pyrolysis of brown algae using carbon dioxide and oyster shell. *Journal of CO2 Utilization*, **2019**, 34, 668-675	7.6	12
285	Livestock manure valorization to biochemicals and energy using CO2: A case study of goat excreta. *Journal of CO2 Utilization*, **2019**, 30, 107-111	7.6	12
284	Catalytic Pyrolysis of Tetra Pak over Acidic Catalysts. *Catalysts*, **2020**, 10, 602	4	12
283	Direct conversion of NO and SO in flue gas into fertilizer using ammonia and ozone. *Journal of Hazardous Materials*, **2020**, 397, 122581	12.8	12
282	Metallic nickel supported on mesoporous silica as catalyst for hydrodeoxygenation: effect of pore size and structure. *Research on Chemical Intermediates*, **2018**, 44, 3723-3735	2.8	12
281	Catalytic pyrolysis of polystyrene and polyethylene terephthalate over Al-MSU-F. *Energy Procedia*, **2018**, 144, 111-117	2.3	12
280	Microalgal-based biochar in wastewater remediation: Its synthesis, characterization and applications. *Environmental Research*, **2022**, 204, 111966	7.9	12
279	Catalytic upgrading of lignin derived bio-oil model compound using mesoporous solid catalysts. *Research on Chemical Intermediates*, **2016**, 42, 3-17	2.8	11
278	Production of an upgraded lignin-derived bio-oil using the clay catalysts of bentonite and olivine and the spent FCC in a bench-scale fixed bed pyrolyzer. *Environmental Research*, **2019**, 172, 658-664	7.9	11
277	Catalytic conversion of waste particle board and polypropylene over H-beta and HY zeolites. *Renewable Energy*, **2015**, 79, 9-13	8.1	11
276	Liquid Phase Plasma Synthesis of Iron Oxide Nanoparticles on Nitrogen-Doped Activated Carbon Resulting in Nanocomposite for Supercapacitor Applications. *Nanomaterials*, **2018**, 8,	5.4	11
275	The use of calcined seashell for the prevention of char foaming/agglomeration and the production of high-quality oil during the pyrolysis of lignin. *Renewable Energy*, **2019**, 144, 147-152	8.1	11
274	Synthesis of highly ordered mesoporous CeO2 and low temperature CO oxidation over Pd/mesoporous CeO2. *Research on Chemical Intermediates*, **2011**, 37, 1181-1192	2.8	11
273	Assessment of wood pellet combustion in a domestic stove. *Journal of Material Cycles and Waste Management*, **2011**, 13, 165-172	3.4	11
272	Synthesis of biodiesel from an oil fraction separated from food waste leachate. *Korean Journal of Chemical Engineering*, **2011**, 28, 2287-2292	2.8	11
271	Catalytic degradation of high-density polyethylene over SAPO-34 synthesized with various templates. *Korean Journal of Chemical Engineering*, **2010**, 27, 1768-1772	2.8	11

270	Production of Polyhydroxyalkanoates from Sludge Palm Oil Using S12. *Journal of Microbiology and Biotechnology*, **2017**, 27, 990-994	3.3	11
269	Potential for sustainable utilisation of agricultural residues for bioenergy production in Pakistan: An overview. *Journal of Cleaner Production*, **2021**, 287, 125047	10.3	11
268	Increased Aromatics Formation by the Use of High-Density Polyethylene on the Catalytic Pyrolysis of Mandarin Peel over HY and HZSM-5. *Catalysts*, **2018**, 8, 656	4	11
267	Catalytic steam gasification of food waste using Ni-loaded rice husk derived biochar for hydrogen production. *Chemosphere*, **2021**, 280, 130671	8.4	11
266	Hydrothermal Liquefaction of Concentrated Acid Hydrolysis Lignin in a Bench-Scale Continuous Stirred Tank Reactor. *Energy & Fuels*, **2019**, 33, 6421-6428	4.1	10
265	Use of steel slag as a catalyst in CO-cofeeding pyrolysis of pine sawdust. *Journal of Hazardous Materials*, **2020**, 392, 122275	12.8	10
264	Catalytic conversion of 1,1,1,2-tetrafluoroethane (HFC-134a). *Korean Journal of Chemical Engineering*, **2018**, 35, 1611-1619	2.8	10
263	Characteristics of pellet-type adsorbents prepared from water treatment sludge and their effect on trimethylamine removal. *Korean Journal of Chemical Engineering*, **2014**, 31, 624-629	2.8	10
262	Contribution of Dissolved Oxygen to Methyl Orange Decomposition by Liquid Phase Plasma Processes System. *Ozone: Science and Engineering*, **2014**, 36, 244-248	2.4	10
261	Selective catalytic reduction of NOx using RDF char and municipal solid waste char based catalyst. *Journal of Material Cycles and Waste Management*, **2011**, 13, 173-179	3.4	10
260	Membrane/PSA Hybrid Process for Carbon Dioxide Recovery at Low Concentration. *Studies in Surface Science and Catalysis*, **2004**, 153, 543-546	1.8	10
259	Fast pyrolysis of Medium-Density Fiberboard Using a Fluidized Bed Reactor. *Applied Chemistry for Engineering*, **2013**, 24, 672-675		10
258	Progress of the Pyrolyzer Reactors and Advanced Technologies for Biomass Pyrolysis Processing. *Sustainability*, **2021**, 13, 11061	3.6	10
257	Biodiesel synthesis from bio-heavy oil through thermally induced transesterification. *Journal of Cleaner Production*, **2021**, 294, 126347	10.3	10
256	Study of stainless steel electrodes after electrochemical analysis in sea water condition. *Environmental Research*, **2019**, 173, 549-555	7.9	9
255	Effect of the surfactant on size of nickel nanoparticles generated by liquid-phase plasma method. *International Journal of Precision Engineering and Manufacturing*, **2015**, 16, 1305-1310	1.7	9
254	Facile precipitation of tin oxide nanoparticles on graphene sheet by liquid phase plasma method for enhanced electrochemical properties. *Korean Journal of Chemical Engineering*, **2018**, 35, 750-756	2.8	9
253	Synthesis of jet fuel through the oligomerization of butenes on zeolite catalysts. *Research on Chemical Intermediates*, **2018**, 44, 3823-3833	2.8	9

252	Biodiesel production via the transesterification of soybean oil using waste starfish (Asterina pectinifera). *Applied Biochemistry and Biotechnology*, **2013**, 170, 1426-36	3.2	9
251	Catalytic pyrolysis of waste wood chip over mesoporous materials using Py-GC/MS. *Research on Chemical Intermediates*, **2011**, 37, 1355-1361	2.8	9
250	Chemical compositional distribution of ethylene-1-butene copolymer prepared with heterogeneous ziegler-natta catalyst: TREF and crystaf analysis. *Macromolecular Research*, **2009**, 17, 296-300	1.9	9
249	Catalytic degradation of polyethylene over ferrierite. *Research on Chemical Intermediates*, **2008**, 34, 727-735	1.8	9
248	Catalytic Pyrolysis of Cellulose over SAPO-11 Using Py-GC/MS. *Bulletin of the Korean Chemical Society*, **2013**, 34, 2399-2402	1.2	9
247	Degradation behaviors of naproxen by a hybrid TiO photocatalyst system with process components. *Science of the Total Environment*, **2020**, 708, 135216	10.2	9
246	Energy, economic, and environmental impacts of sustainable biochar systems in rural China. *Critical Reviews in Environmental Science and Technology*, **2020**, 1-29	11.1	9
245	Biohydrogen synthesis from catalytic steam gasification of furniture waste using nickel catalysts supported on modified CeO2. *International Journal of Hydrogen Energy*, **2021**, 46, 16603-16611	6.7	9
244	Characterization of Bimetallic Fe-Ru Oxide Nanoparticles Prepared by Liquid-Phase Plasma Method. *Nanoscale Research Letters*, **2016**, 11, 344	5	9
243	Bioremediation strategies with biochar for polychlorinated biphenyls (PCBs)-contaminated soils: A review. *Environmental Research*, **2021**, 200, 111757	7.9	9
242	Microwave co-pyrolysis for simultaneous disposal of environmentally hazardous hospital plastic waste, lignocellulosic, and triglyceride biowaste. *Journal of Hazardous Materials*, **2022**, 423, 127096	12.8	9
241	Heterogeneous photocatalytic degradation and hydrogen evolution from ethanolamine nuclear wastewater by a liquid phase plasma process. *Science of the Total Environment*, **2019**, 676, 190-196	10.2	8
240	Assessing the Theoretical Prospects of Bioethanol Production as a Biofuel from Agricultural Residues in Bangladesh: A Review. *Sustainability*, **2020**, 12, 8583	3.6	8
239	Using low carbon footprint high-pressure carbon dioxide in bioconversion of aspen branch waste for sustainable bioethanol production. *Bioresource Technology*, **2020**, 313, 123675	11	8
238	Catalytic Properties of Microporous Zeolite Catalysts in Synthesis of Isosorbide from Sorbitol by Dehydration. *Catalysts*, **2020**, 10, 148	4	8
237	Catalytic copyrolysis of cork oak and bio-oil distillation residue. *Applied Surface Science*, **2018**, 429, 95-106	6.7	8
236	Pyrolysis of an LDPE-LLDPE-EVA copolymer mixture over various mesoporous catalysts. *Korean Journal of Chemical Engineering*, **2012**, 29, 196-200	2.8	8
235	Selective hydroisomerization of n-dodecane over platinum supported on zeolites. *Research on Chemical Intermediates*, **2011**, 37, 1215-1223	2.8	8

234	Catalytic conversion of waste particle board to bio-oil using nanoporous catalyst. *Journal of Nanoscience and Nanotechnology*, **2012**, 12, 5367-72	1.3	8
233	Development of adsorption buffer and pressure swing adsorption (PSA) unit for gasoline vapor recovery. *Korean Journal of Chemical Engineering*, **2004**, 21, 676-679	2.8	8
232	Application of MCN-1 to the Adsorptive Removal of Indoor Formaldehyde. *Science of Advanced Materials*, **2014**, 6, 1511-1515	2.3	8
231	Valorization of Phytoremediation Byproduct via Synthesis of Biodiesel from Cockspur Grass (Echinochloa crus-galli) Seed. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 11588-11595	8.3	8
230	Offering a new option to valorize hen manure by CO2-assisted catalytic pyrolysis over biochar and metal catalysts. *Journal of CO2 Utilization*, **2020**, 42, 101344	7.6	8
229	Treatment of phenol wastewater using nitrogen-doped magnetic mesoporous hollow carbon. *Chemosphere*, **2021**, 271, 129595	8.4	8
228	Oxidative desulfurization of refinery diesel pool fractions using LaVO4 photocatalyst. *Journal of Industrial and Engineering Chemistry*, **2021**, 98, 283-288	6.3	8
227	Catalytic Pyrolysis of Wild Reed over a Zeolite-Based Waste Catalyst. *Energies*, **2016**, 9, 201	3.1	8
226	Acetaldehyde removal and increased H/CO gas yield from biomass gasification over metal-loaded Kraft lignin char catalyst. *Journal of Environmental Management*, **2019**, 232, 330-335	7.9	8
225	Comparison studies on pore development mechanisms of activated hard carbons from polymeric resins and their applications for electrode materials. *Renewable Energy*, **2019**, 144, 116-122	8.1	8
224	Catalytic co-conversion of Kraft lignin and linear low-density polyethylene over mesoZSM-5 and Al-SBA-15 catalysts. *Catalysis Today*, **2020**, 355, 246-251	5.3	8
223	The photocatalytic destruction of cimetidine using microwave-assisted TiO photocatalysts hybrid system. *Journal of Hazardous Materials*, **2020**, 391, 122568	12.8	8
222	Effects of different Al2O3 support on HDPE gasification for enhanced hydrogen generation using Ni-based catalysts. *International Journal of Hydrogen Energy*, **2021**, 46, 18085-18092	6.7	8
221	Effect of Accelerated High Temperature on Oxidation and Polymerization of Biodiesel from Vegetable Oils. *Energies*, **2018**, 11, 3514	3.1	8
220	Valorization of rice husk to aromatics via thermocatalytic conversion in the presence of decomposed methane. *Chemical Engineering Journal*, **2021**, 417, 129264	14.7	8
219	Syntrophic metabolism facilitates Methanosarcina-led methanation in the anaerobic digestion of lipidic slaughterhouse waste. *Bioresource Technology*, **2021**, 335, 125250	11	8
218	Study on the contribution ratios of particulate matter emissions in differential provinces concerning condensable particulate matter. *Energy and Environment*, **2019**, 30, 1206-1218	2.4	7
217	Catalytic Pyrolysis of Organosolv and Klason Lignin Over Al-SBA-15. *Journal of Nanoscience and Nanotechnology*, **2018**, 18, 1423-1426	1.3	7

216	Application of mesoporous Al-MCM-48 material to the conversion of lignin. *Journal of Nanoscience and Nanotechnology*, **2014**, 14, 2990-5	1.3	7
215	Highly Selective Catalytic Properties of HZSM-5 Zeolite in the Synthesis of Acetyl Triethyl Citrate by the Acetylation of Triethyl Citrate with Acetic Anhydride. *Catalysts*, **2017**, 7, 321	4	7
214	Removal of NO(x) at low temperature over mesoporous alpha-Mn2O3 catalyst. *Journal of Nanoscience and Nanotechnology*, **2014**, 14, 2527-31	1.3	7
213	Preparation of highly dispersed tungsten oxide on MCM-41 via atomic layer deposition and its application to butanol dehydration. *Journal of Nanoscience and Nanotechnology*, **2012**, 12, 6074-9	1.3	7
212	Reduction of tar using cheap catalysts during sewage sludge gasification. *Journal of Material Cycles and Waste Management*, **2011**, 13, 186-189	3.4	7
211	Cu2+ion reduction in wastewater over RDF-derived char. *Carbon Letters*, **2016**, 18, 49-55	2.3	7
210	Acetaldehyde oxidation under high humidity using a catalytic non-thermal plasma system over Mn-loaded Y zeolites. *Materials Letters*, **2020**, 262, 127051	3.3	7
209	Acid-treated waste red mud as an efficient catalyst for catalytic fast copyrolysis of lignin and polyproylene and ozone-catalytic conversion of toluene. *Environmental Research*, **2020**, 191, 110149	7.9	7
208	Comprehensive kinetic study of Imperata Cylindrica pyrolysis via Asym2sig deconvolution and combined kinetics. *Journal of Analytical and Applied Pyrolysis*, **2021**, 156, 105133	6	7
207	Catalytic Co-Pyrolysis of Kraft Lignin with Refuse-Derived Fuels Using Ni-Loaded ZSM-5 Type Catalysts. *Catalysts*, **2018**, 8, 506	4	7
206	Effect of Mg/Al2O3 and Calcination Temperature on the Catalytic Decomposition of HFC-134a. *Catalysts*, **2019**, 9, 270	4	6
205	Enhanced bioaromatics synthesis via catalytic co-pyrolysis of cellulose and spent coffee ground over microporous HZSM-5 and HY. *Environmental Research*, **2020**, 184, 109311	7.9	6
204	Continuous-flow production of petroleum-replacing fuels from highly viscous Kraft lignin pyrolysis oil using its hydrocracked oil as a solvent. *Energy Conversion and Management*, **2020**, 213, 112728	10.6	6
203	Catalytic Pyrolysis of Municipal Plastic Film Wastes Over Nanoporous Al-MCM-41. *Journal of Nanoscience and Nanotechnology*, **2018**, 18, 1078-1082	1.3	6
202	Application of Recycled Zero-Valent Iron Nanoparticle to the Treatment of Wastewater Containing Nitrobenzene. *Journal of Nanomaterials*, **2015**, 2015, 1-8	3.2	6
201	Liquid Phase Plasma Synthesis of Iron Oxide/Carbon Composite as Dielectric Material for Capacitor. *Journal of Nanomaterials*, **2014**, 2014, 1-6	3.2	6
200	Reactor sizing for butane steam reforming over Ni and Ru catalysts. *Korean Journal of Chemical Engineering*, **2014**, 31, 412-418	2.8	6
199	The application of Py-GC/MS for the catalytic upgrading of oil separated from summer food waste leachate. *Research on Chemical Intermediates*, **2011**, 37, 1283-1291	2.8	6

198	CO2 Hydrogenation over Copper-Based Hybrid Catalysts for the Synthesis of Oxygenates. *ACS Symposium Series*, **2003**, 183-194	0.4	6
197	Economic Evaluation of Carbon Capture and Utilization Applying the Technology of Mineral Carbonation at Coal-Fired Power Plant. *Sustainability*, **2020**, 12, 6175	3.6	6
196	Catalytic copyrolysis of particle board and polypropylene over Al-MCM-48. *Materials Research Bulletin*, **2016**, 82, 61-66	5.1	6
195	Development of PM and PM cyclones for small sampling ports at stationary sources: Numerical and experimental study. *Environmental Research*, **2021**, 193, 110507	7.9	6
194	Performance of CO and Fe-modified lignin char on arsenic (V) removal from water. *Chemosphere*, **2021**, 279, 130521	8.4	6
193	Fast hydropyrolysis of biomass Conversion: A comparative review. *Bioresource Technology*, **2021**, 342, 126067	11	6
192	Catalytic pyrolysis of polypropylene over Ga loaded HZSM-5. *Journal of Industrial and Engineering Chemistry*, **2021**, 103, 136-141	6.3	6
191	Valorization of hazardous COVID-19 mask waste while minimizing hazardous byproducts using catalytic gasification. *Journal of Hazardous Materials*, **2022**, 423, 127222	12.8	6
190	Assembling a supercapacitor electrode with dual metal oxides and activated carbon using a liquid phase plasma. *Journal of Environmental Management*, **2017**, 203, 880-887	7.9	5
189	Fabrication of Yb-doped TiO2 using liquid phase plasma process and its photocatalytic degradation activity of naproxen. *Journal of Materials Science*, **2020**, 55, 9665-9675	4.3	5
188	Fast pyrolysis of waste pepper stem over waste FCC catalyst. *Research on Chemical Intermediates*, **2018**, 44, 3773-3786	2.8	5
187	The use of high density polyethylene (HDPE) as a co-feeding feedstock on the catalytic pyrolysis of yellow poplar over Al-MCM-48 and Al-MSU-F. *Journal of Analytical and Applied Pyrolysis*, **2018**, 135, 390-396	6	5
186	Analysis of National PM2.5 (FPM and CPM) Emissions by Past, Current, and Future Energy Mix Scenarios in the Republic of Korea. *Sustainability*, **2019**, 11, 4289	3.6	5
185	On-line Analysis of Catalytic Reaction Products Using a High-Pressure Tandem Micro-reactor GC/MS. *Analytical Sciences*, **2017**, 33, 1085-1089	1.7	5
184	Catalytic conversion of 1,2-dichlorobenzene over mesoporous materials from zeolite. *Journal of Nanoscience and Nanotechnology*, **2010**, 10, 3639-42	1.3	5
183	Effect of reduction temperature on the preparation of zero-valent iron aerogels for trichloroethylene dechlorination. *Korean Journal of Chemical Engineering*, **2008**, 25, 1377-1384	2.8	5
182	Calixarene Derivatives as Novel Nanopore Generators for Templates of Nanoporous Thin Films. *Macromolecular Materials and Engineering*, **2006**, 291, 369-376	3.9	5
181	Ex-situ Catalytic Pyrolysis of Korean Native Oak Tree over Microporous Zeolites. *Applied Chemistry for Engineering*, **2016**, 27, 407-414		5

180	Recent advancements on the sustainable biochar based semiconducting materials for photocatalytic applications: A state of the art review. *Journal of Cleaner Production*, **2022**, 330, 129899	10.3	5
179	A review on integrated thermochemical hydrogen production from water. *International Journal of Hydrogen Energy*, **2021**, 47, 4346-4346	6.7	5
178	Progress in thermochemical conversion of aquatic weeds in shellfish aquaculture for biofuel generation: Technical and economic perspectives. *Bioresource Technology*, **2022**, 344, 126202	11	5
177	Systematic Assessment of Visible-Light-Driven Microspherical VO Photocatalyst for the Removal of Hazardous Organosulfur Compounds from Diesel. *Nanomaterials*, **2021**, 11,	5.4	5
176	Methodology to Calculate the CO2 Emission Reduction at the Coal-Fired Power Plant: CO2 Capture and Utilization Applying Technology of Mineral Carbonation. *Sustainability*, **2020**, 12, 7402	3.6	5
175	A Comparative Study on the Reduction Effect in Greenhouse Gas Emissions between the Combined Heat and Power Plant and Boiler. *Sustainability*, **2020**, 12, 5144	3.6	5
174	Effective toluene oxidation under ozone over mesoporous MnO/AlO catalyst prepared by solvent deficient method: Effect of Mn precursors on catalytic activity. *Environmental Research*, **2021**, 195, 110876	7.9	5
173	In-situ catalytic co-pyrolysis of kukersite oil shale with black pine wood over acid zeolites. *Journal of Analytical and Applied Pyrolysis*, **2021**, 155, 105050	6	5
172	Characterization and Thermal Behavior Study of Biomass from Invasive Acacia mangium Species in Brunei Preceding Thermochemical Conversion. *Sustainability*, **2021**, 13, 5249	3.6	5
171	Castor Leaves-Based Biochar for Adsorption of Safranin from Textile Wastewater. *Sustainability*, **2021**, 13, 6926	3.6	5
170	Pore volume upgrade of biochar from spent coffee grounds by sodium bicarbonate during torrefaction. *Chemosphere*, **2021**, 275, 129999	8.4	5
169	Microporous Zeolites as Catalysts for the Preparation of Decyl Glucoside from Glucose with 1-Decanol by Direct Glucosidation. *Catalysts*, **2016**, 6, 216	4	5
168	In-Situ Catalytic Fast Pyrolysis of Pinecone over HY Catalysts. *Catalysts*, **2019**, 9, 1034	4	5
167	Effects of Pore Structure on n-Butane Adsorption Characteristics of Polymer-Based Activated Carbon. *Industrial & Engineering Chemistry Research*, **2019**, 58, 736-741	3.9	5
166	Enhanced Electrochemical Performance of Carbon Nanotube with Nitrogen and Iron Using Liquid Phase Plasma Process for Supercapacitor Applications. *International Journal of Molecular Sciences*, **2018**, 19,	6.3	5
165	A Hybrid Reactor System Comprised of Non-Thermal Plasma and Mn/Natural Zeolite for the Removal of Acetaldehyde from Food Waste. *Catalysts*, **2018**, 8, 389	4	5
164	Processing of lignocellulose in ionic liquids: A cleaner and sustainable approach. *Journal of Cleaner Production*, **2021**, 129189	10.3	5
163	Progress in the torrefaction technology for upgrading oil palm wastes to energy-dense biochar: A review. *Renewable and Sustainable Energy Reviews*, **2021**, 151, 111645	16.2	5

162	Rapid Quantification of N-Methyl-2-pyrrolidone in Polymer Matrices by Thermal Desorption-GC/MS. *Analytical Sciences*, **2017**, 33, 821-824	1.7	4
161	Oligomerization of endo-dicyclopentadiene using a mesoporous catalyst in a fixed-bed reactor. *Research on Chemical Intermediates*, **2016**, 42, 47-55	2.8	4
160	Removal of Food Waste Odor Using Nanoporous Carbon Adsorbents. *Journal of Nanoscience and Nanotechnology*, **2018**, 18, 1492-1494	1.3	4
159	Effect of Liquid Phase Plasma Irradiation on Production by Photocatalytic Water Splitting over SrTiO3 Photocatalysts. *ChemCatChem*, **2019**, 11, 6451-6459	5.2	4
158	In-Situ Catalytic Pyrolysis of Xylan and Dealkaline Lignin over SAPO-11. *Topics in Catalysis*, **2017**, 60, 644-650	2.3	4
157	Catalytic upgrading of xylan over mesoporous Y catalyst. *Journal of Nanoscience and Nanotechnology*, **2014**, 14, 2925-30	1.3	4
156	Development of a New Wind-Blown-Dust Emission Module Using Comparative Assessment of Existing Dust Models. *Particulate Science and Technology*, **2010**, 28, 267-286	2	4
155	The effect of PtRuW ternary electrocatalysts on methanol oxidation reaction in direct methanol fuel cells. *Korean Journal of Chemical Engineering*, **2010**, 27, 802-806	2.8	4
154	Deoxydesulfurization of dibenzothiophene sulfone over cesium/MCM-41 catalysts. *Research on Chemical Intermediates*, **2010**, 36, 669-676	2.8	4
153	Biohydrogen production from furniture waste via catalytic gasification in air over Ni-loaded Ultra-stable Y-type zeolite. *Chemical Engineering Journal*, **2021**, 133793	14.7	4
152	Achievements in the production of bioplastics from microalgae. *Phytochemistry Reviews*,1	7.7	4
151	PM Management Methods Considering Condensable PM Emissions from Stationary Sources in Seoul and Incheon. *Journal of Korean Society for Atmospheric Environment*, **2017**, 33, 319-325	1.5	4
150	A Comparative Study on Hexavalent Chromium Adsorption onto Chitosan and Chitosan-Based Composites. *Polymers*, **2021**, 13,	4.5	4
149	Adsorption Performance of Basic Gas over Pellet-type Adsorbents Prepared from Water Treatment Sludge. *Korean Chemical Engineering Research*, **2013**, 51, 352-357		4
148	Facile Preparation of Ni-Co Bimetallic Oxide/Activated Carbon Composites Using the Plasma in Liquid Process for Supercapacitor Electrode Applications. *Nanomaterials*, **2019**, 10,	5.4	4
147	Co-Combustion of Blends of Coal and Underutilised Biomass Residues for Environmental Friendly Electrical Energy Production. *Sustainability*, **2021**, 13, 4881	3.6	4
146	Effect of high energy ball milling and low temperature densification of plate-like alumina powder. *Powder Technology*, **2021**, 383, 84-92	5.2	4
145	Investigation of the activity and selectivity of supported rhenium catalysts for the hydrodeoxygenation of 2-methoxyphenol. *Catalysis Today*, **2021**, 375, 164-173	5.3	4

144	Recycling of a spent alkaline battery as a catalyst for the total oxidation of hydrocarbons. *Journal of Hazardous Materials*, **2021**, 403, 123929	12.8	4
143	Catalytic upgrading of Quercus Mongolica under methane environment to obtain high yield of bioaromatics. *Environmental Pollution*, **2021**, 272, 116016	9.3	4
142	Investigation of the thermodynamic performance of an existing steam power plant via energy and exergy analyses to restrain the environmental repercussions: A simulation study. *Environmental Engineering Research*, **2022**, 27, 200683-0	3.6	4
141	Recent applications of the liquid phase plasma process. *Korean Journal of Chemical Engineering*, **2021**, 38, 885-898	2.8	4
140	Catalytic Copyrolysis of Cork Oak and Waste Plastic Films over HBeta. *Catalysts*, **2018**, 8, 318	4	4
139	Synergistic effects of CO on complete thermal degradation of plastic waste mixture through a catalytic pyrolysis platform: A case study of disposable diaper. *Journal of Hazardous Materials*, **2021**, 419, 126537	12.8	4
138	Waste furniture gasification using rice husk based char catalysts for enhanced hydrogen generation. *Bioresource Technology*, **2021**, 341, 125813	11	4
137	Catalytic Decomposition of an Energetic Ionic Liquid Solution over Hexaaluminate Catalysts. *Catalysts*, **2019**, 9, 80	4	3
136	Emulsification characteristics of ether extracted pyrolysis-oil in diesel using various combinations of emulsifiers (Span 80, Atlox 4916 and Zephrym PD3315) in double reactor system. *Environmental Research*, **2020**, 184, 109267	7.9	3
135	Health Risk Assessment on Hazardous Ingredients in Household Deodorizing Products. *International Journal of Environmental Research and Public Health*, **2018**, 15,	4.6	3
134	Activated Carbons from Thermoplastic Precursors and Their Energy Storage Applications. *Nanomaterials*, **2019**, 9,	5.4	3
133	Photodegradation of HCFC-22 Using Microwave Discharge Electrodeless Mercury Lamp with TiO2Photocatalyst Balls. *Journal of Chemistry*, **2014**, 2014, 1-6	2.3	3
132	Catalytic characteristics of titanium oxide/MCM-41 synthesized by liquid phase atomic layer deposition. *Journal of Nanoscience and Nanotechnology*, **2013**, 13, 1988-92	1.3	3
131	Estimation of Threshold Friction Velocity Using a Physical Parameterization Over the Asian Dust Source Region. *Particulate Science and Technology*, **2013**, 31, 119-127	2	3
130	Catalytic pyrolysis of oil fractions separated from food waste leachate over nanoporous acid catalysts. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 6167-71	1.3	3
129	Utilization of a by-product produced from oxidative desulfurization process over Cs-mesoporous silica catalysts. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 1706-9	1.3	3
128	The promotion effect of catalytic activity by Ru substitution at the B site of La1− Sr x Cr1− Ru y O3− for propane steam reforming. *Research on Chemical Intermediates*, **2011**, 37, 1313-1324	2.8	3
127	Analytical Expression on Characteristic Time Scale of Black Carbon Aging due to Condensation of Hygroscopic Species. *Aerosol Science and Technology*, **2012**, 46, 601-609	3.4	3

126	Cyclodextrin-modified MCM-41 for selective double bond migration. *Research on Chemical Intermediates*, **2010**, 36, 661-667	2.8	3
125	Effect of Isotherm Selection on Performance Prediction of CO2 PSA Process. *Studies in Surface Science and Catalysis*, **2004**, 153, 547-550	1.8	3
124	Eco-friendly rice husk derived biochar as a highly efficient noble Metal-Free cocatalyst for high production of H2 using solar light irradiation. *Chemical Engineering Journal*, **2022**, 434, 134743	14.7	3
123	Sustainable valorization of algae biomass via thermochemical processing route: An overview. *Bioresource Technology*, **2022**, 344, 126399	11	3
122	Catalytic Gasification of Mandarin Waste Residue using Ni/CeO2-ZrO2. *Bulletin of the Korean Chemical Society*, **2013**, 34, 3387-3390	1.2	3
121	Increased aromatics production by co-feeding waste oil sludge to the catalytic pyrolysis of cellulose. *Energy*, **2022**, 239, 122331	7.9	3
120	Estimation, and Framework Proposal of Greenhouse Gas Emissions of Fluorinated Substitutes for Ozone-Depleting Substances by Application Area in the Republic of Korea. *Sustainability*, **2020**, 12, 6355	3.6	3
119	Development of highly efficient solid acid catalysts supported on mesoporous KIT-6 for esterification of oleic acid. *Korean Journal of Chemical Engineering*, **2021**, 38, 966-974	2.8	3
118	Bimetallic Ni-Re catalysts for the efficient hydrodeoxygenation of biomass-derived phenols. *International Journal of Energy Research*, **2021**, 45, 16349-16361	4.5	3
117	High-quality oil production via the catalytic conversion of printed circuit boards. *Journal of Cleaner Production*, **2021**, 296, 126614	10.3	3
116	Strategic disposal of flood debris via CO-assisted catalytic pyrolysis. *Journal of Hazardous Materials*, **2021**, 412, 125242	12.8	3
115	Catalytic pyrolysis of plastics derived from end-of-life-vehicles (ELVs) under the CO2 environment. *International Journal of Energy Research*, **2021**, 45, 16781-16793	4.5	3
114	Effect of the two-stage process comprised of ether extraction and supercritical hydrodeoxygenation on pyrolysis oil upgrading. *Chemical Engineering Journal*, **2021**, 404, 126531	14.7	3
113	Oligomerization of Butene Mixture over NiO/Mesoporous Aluminosilicate Catalyst. *Catalysts*, **2018**, 8, 456	4	3
112	Catalytic Hydrodeoxygenation of Bio-Oils Derived from Pyrolysis of Cork Oak Using Supercritical Ethanol. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 2674-2677	1.3	2
111	Decyl Glucoside Synthesized by Direct Glucosidation of D-Glucose Over Zeolite Catalysts and Its Estrogenicity as Non-Endocrine Disruptive Surfactant. *Journal of Nanoscience and Nanotechnology*, **2019**, 19, 1172-1175	1.3	2
110	Catalytic Hydrodeoxygenation of Cork Oak Pyrolysis Oil Over Ni/Al-MCM-41. *Journal of Nanoscience and Nanotechnology*, **2019**, 19, 1158-1161	1.3	2
109	Assessing the photocatalytic activity of europium doped TiO2 using liquid phase plasma process on acetylsalicylic acid. *Catalysis Today*, **2020**,	5.3	2

108	Hydrodeoxygenation of Pyrolysis Bio-Oil Over Ni Impregnated Mesoporous Materials. *Journal of Nanoscience and Nanotechnology*, **2018**, 18, 1331-1335	1.3	2
107	Ring Enlargement of Methylcyclopentane over Pt/(HZSM-48+pseudoboehmite) Catalysts. *Catalysts*, **2019**, 9, 531	4	2
106	Hydroisomerization of n-dodecane over Pt/Al-MCM-48 catalysts. *Journal of Nanoscience and Nanotechnology*, **2014**, 14, 3112-6	1.3	2
105	Catalytic co-pyrolysis of waste particle board and polyproplylene over nanoporous Al-MCM-41 catalysts. *Journal of Nanoscience and Nanotechnology*, **2014**, 14, 8489-94	1.3	2
104	Pyrolysis of Suncheon-Bay wild reed over zeolite catalysts. *Journal of Renewable and Sustainable Energy*, **2014**, 6, 042002	2.5	2
103	Development of a moment model for condensational obliteration of nanoparticle aggregates. *Journal of Nanoscience and Nanotechnology*, **2013**, 13, 2008-11	1.3	2
102	Effects of dual initiators and catalytic additives on atom transfer radical polymerization of styrene. *Research on Chemical Intermediates*, **2011**, 37, 1257-1265	2.8	2
101	Techno-Economical Evaluation of Bio-Oil Production via Biomass Fast Pyrolysis Process: A Review. *Frontiers in Energy Research*, **2022**, 9,	3.8	2
100	Catalytic cracking of polystyrene pyrolysis oil: Effect of NbO and NiO/NbO catalyst on the liquid product composition.. *Waste Management*, **2022**, 141, 240-250	8.6	2
99	Catalytic Pyrolysis of Robinia pseudoacacia Over Mesoporous Materials Produced from Zeolite HBeta. *Nanoscience and Nanotechnology Letters*, **2016**, 8, 340-344	0.8	2
98	Nanoneedle-Assembled Copper/Cobalt sulfides on nickel foam as an enhanced 3D hierarchical catalyst to activate monopersulfate for Rhodamine b degradation.. *Journal of Colloid and Interface Science*, **2021**, 613, 168-181	9.3	2
97	Recent advances of hybrid solar - Biomass thermo-chemical conversion systems.. *Chemosphere*, **2021**, 290, 133245	8.4	2
96	Biofuel Production as an Example of Virtuous Valorization of Swine Manure. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 13761-13772	8.3	2
95	Effects of Sulfuric Acid Treatment on the Performance of Ga-Al2O3 for the Hydrolytic Decomposition of 1,1,1,2-Tetrafluoroethane (HFC-134a). *Catalysts*, **2020**, 10, 766	4	2
94	Biodiesel production from jatropha seeds with bead-type heterogeneous catalyst. *Korean Journal of Chemical Engineering*, **2021**, 38, 763-770	2.8	2
93	Assessment of Degradation Behavior for Acetylsalicylic Acid Using a Plasma in Liquid Process. *Catalysts*, **2019**, 9, 965	4	2
92	Effective reduction plan for greenhouse gas inventories of local governments. *Energy and Environment*, **2021**, 32, 62-74	2.4	2
91	Upgrading of sulfur-containing biogas into high quality fuel via oxidative coupling of methane. *International Journal of Energy Research*, **2021**, 45, 19363	4.5	2

90	Effect of eggshell- and homo-type Ni/AlO catalysts on the pyrolysis of food waste under CO atmosphere. *Journal of Environmental Management*, **2021**, 294, 112959	7.9	2
89	Different pyrolysis kinetics and product distribution of municipal and livestock manure sewage sludge. *Environmental Pollution*, **2021**, 285, 117197	9.3	2
88	Effect of desilication of HZSM-5 on the catalytic pyrolysis of polystyrene. *Materials Letters*, **2021**, 300, 130107	3.3	2
87	Enhanced degradation of ultra-violet stabilizer Bis(4-hydroxy)benzophenone using oxone catalyzed by hexagonal nanoplate-assembled CoS 3-dimensional cluster. *Chemosphere*, **2022**, 288, 132427	8.4	2
86	Hydrogen-rich gas production via steam gasification of food waste over basic oxides (MgO/CaO/SrO) promoted-Ni/AlO catalysts. *Chemosphere*, **2022**, 287, 132224	8.4	2
85	Hydroupgrading of Bio-Oil Over PtMg/KIT-6 Catalysts. *Journal of Nanoscience and Nanotechnology*, **2019**, 19, 1126-1129	1.3	1
84	Comparative study of greenhouse gas emissions between national government and local governments in Korea. *Energy and Environment*, **2020**, 31, 1403-1415	2.4	1
83	Catalytic Rapid Pyrolysis ofQuercus variabilisover Nanoporous Catalysts. *Journal of Nanomaterials*, **2015**, 2015, 1-6	3.2	1
82	Photocatalytic Activity of Hierarchically Structured TiO2Films Synthesized by Chemical Vapor Deposition. *International Journal of Photoenergy*, **2014**, 2014, 1-7	2.1	1
81	Hydroconversion of n-dodecane over nanoporous catalysts. *Journal of Nanoscience and Nanotechnology*, **2013**, 13, 714-7	1.3	1
80	Simulation of coagulation and sintering of nano-structured particles using the moment method. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 1664-7	1.3	1
79	Kinetic Analysis for the Catalytic Pyrolysis of Polypropylene over Low Cost Mineral Catalysts. *Sustainability*, **2021**, 13, 13386	3.6	1
78	Conversion of biomass blends (walnut shell and pearl millet) for the production of solid biofuel via torrefaction under different conditions.. *Chemosphere*, **2022**, 133894	8.4	1
77	Upgrading spent battery separator into syngas and hydrocarbons through CO2-Assisted thermochemical platform. *Energy*, **2021**, 122552	7.9	1
76	Effect of torrefaction and fractional condensation on the quality of bio-oil from biomass pyrolysis for fuel applications. *Fuel*, **2022**, 312, 122959	7.1	1
75	Catalytic Upgrading of Geodae-Uksae 1 over Mesoporous MCM-48 Catalysts. *Bulletin of the Korean Chemical Society*, **2014**, 35, 1951-1955	1.2	1
74	Survey of perfluorinated compounds in consumer products by liquid chromatography–tandem mass spectrometry. *Energy and Environment*, **2020**, 31, 713-729	2.4	1
73	Economic feasibility through the optimal capacity calculation model of an energy storage system connected to solar power generator. *Energy and Environment*, **2020**, 31, 860-869	2.4	1

72	Complete Oxidation of Volatile Organic Compounds Over Spent Vanadium-Based Catalyst. *Journal of Nanoscience and Nanotechnology*, **2020**, 20, 5671-5675	1.3	1
71	Decomposition of naproxen by plasma in liquid process with TiO photocatslysts and hydrogen peroxide. *Environmental Research*, **2021**, 195, 110899	7.9	1
70	A comprehensive numerical design of firefighting systems for onshore petroleum installations. *Korean Journal of Chemical Engineering*, **2021**, 38, 1-13	2.8	1
69	Catalytic Oxidation of Toluene with Ozone Over the Ru-Mn/Desilicated Nanoporous H-Zeolite Socony Mobil-5 at Room Temperature. *Journal of Nanoscience and Nanotechnology*, **2021**, 21, 3868-3871	1.3	1
68	Precipitation of Manganese and Nickel Nanoparticles on an Activated Carbon Powder for Electrochemical Capacitor Applications. *Journal of Nanoscience and Nanotechnology*, **2016**, 16, 11460-11464	1.3	1
67	Catalytic Performance of Supported Pd Catalyst Prepared with Different Palladium Precursors for Catalytic Combustion of BTH. *Journal of Nanoscience and Nanotechnology*, **2019**, 19, 1208-1212	1.3	1
66	Preparation and Characterization of Bimetallic Fe-Ni Oxide Nanoparticles Using Liquid Phase Plasma Process. *Journal of Nanoscience and Nanotechnology*, **2019**, 19, 2362-2365	1.3	1
65	Upgrading of Organosolv Lignin- and Cellulose-Derived Pyrolyzates Over Ce-MCM-41 Catalyst. *Journal of Nanoscience and Nanotechnology*, **2019**, 19, 1162-1165	1.3	1
64	Facile Synthesis of Chromium Oxide on Activated Carbon Electrodes for Electrochemical Capacitor Application. *Journal of Nanoscience and Nanotechnology*, **2019**, 19, 1078-1081	1.3	1
63	Catalytic hydrodeoxygenation for upgrading of lignin-derived bio-oils **2021**, 129-145		1
62	Nanoporous Alumina Membranes for Sugar Industry: An Investigation of Sintering Parameters Influence onUltrafiltration Performance. *Sustainability*, **2021**, 13, 7593	3.6	1
61	Effect of palladium on the black mass-based catalyst prepared from spent Zn/Mn alkaline batteries for catalytic combustion of volatile organic compounds. *Chemosphere*, **2021**, 276, 130209	8.4	1
60	Ozone-assisted oxidation of methyl ethyl ketone over mesoporous MnOx/Al2O3 catalysts. *Materials Letters*, **2021**, 299, 130105	3.3	1
59	Simultaneous impregnation of Ni and an additive via one-step melt-infiltration: Effect of alkaline-earth metal (Ca, Mg, Sr, and Ba) addition on Ni/Al2O3 for CO2 methanation. *Chemical Engineering Journal*, **2022**, 428, 131393	14.7	1
58	Evaluation of the solar thermal storage of fluidized bed materials for hybrid solar thermo-chemical processes. *Biomass Conversion and Biorefinery*,	2.3	1
57	Preparation of N and Eu doped TiO2 using plasma in liquid process and its photocatalytic degradation activity for diclofenac. *Korean Journal of Chemical Engineering*,1	2.8	1
56	Effect of active species scavengers in photocatalytic desulfurization of hydrocracker diesel using mesoporous Ag3VO4. *Chemical Engineering Journal*, **2022**, 441, 136063	14.7	1
55	Preparation and Characterization of Silver-Iron Bimetallic Nanoparticles on Activated Carbon Using Plasma in Liquid Process.. *Nanomaterials*, **2021**, 11,	5.4	1

54	Direct conversion of lignin to high-quality biofuels by carbon dioxide-assisted hydrolysis combined with transfer hydrogenolysis over supported ruthenium catalysts. *Energy Conversion and Management*, **2022**, 261, 115607	10.6	1
53	Valorization of furniture industry-processed residue via catalytic pyrolysis with methane. *Energy Conversion and Management*, **2022**, 261, 115652	10.6	1
52	Enhancement of Bioaromatics Production from Food Waste through Catalytic Pyrolysis over Zn and Mo-loaded HZSM-5 under an Environment of Decomposed Methane. *Chemical Engineering Journal*, **2022**, 137215	14.7	1
51	Precipitation of Tin Oxide Nanoparticles on Graphene Sheets Using a Liquid Phase Plasma Process. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 4288-4291	1.3	0
50	Catalytic Pyrolysis of Korean Pine () Nut Shell Over Mesoporous Al□□*Journal of Nanoscience and Nanotechnology*, **2018**, 18, 1351-1355	1.3	0
49	Catalytic microwave torrefaction of microalga Chlorella vulgaris FSP-E with magnesium oxide optimized via taguchi approach: A thermo-energetic analysis.. *Chemosphere*, **2021**, 290, 133374	8.4	0
48	Catalytic Pyrolysis of Polyethylene Terephthalate Over Desilicated Beta. *Journal of Nanoscience and Nanotechnology*, **2020**, 20, 5594-5598	1.3	0
47	Catalytic removal of volatile organic compounds using black mass from spent batteries. *Korean Journal of Chemical Engineering*, **2022**, 39, 161	2.8	0
46	Performance Analysis of the Perhydro-Dibenzyl-Toluene Dehydrogenation System□A Simulation Study. *Sustainability*, **2021**, 13, 6490	3.6	0
45	Catalytic Gasification of Rice Hull Using Municipal Solid Waste Incineration Bottom Ash. *Journal of Nanoscience and Nanotechnology*, **2021**, 21, 3764-3768	1.3	0
44	Removal of Cr by Modified Biochar Derived from Corn Husk. *Journal of Nanoscience and Nanotechnology*, **2021**, 21, 3965-3970	1.3	0
43	Suppression of the hazardous substances in catalytically upgraded bio-heavy oil as a precautious measure for clean air pollution controls. *Journal of Hazardous Materials*, **2022**, 421, 126732	12.8	0
42	Production of value-added hydrochar from single-mode microwave hydrothermal carbonization of oil palm waste for de-chlorination of domestic water.. *Science of the Total Environment*, **2022**, 154968	10.2	0
41	Technical benefits of using methane as a pyrolysis medium for catalytic pyrolysis of Kraft Lignin.. *Bioresource Technology*, **2022**, 127131	11	0
40	Integrated hydrothermal and deep eutectic solvent-mediated fractionation of lignocellulosic biocomponents for enhanced accessibility and efficient conversion in anaerobic digestion.. *Bioresource Technology*, **2022**, 127034	11	0
39	Recent advances in wide solar spectrum active W18O49-based photocatalysts for energy and environmental applications. *Catalysis Reviews - Science and Engineering*,1-46	12.6	0
38	Management status and policy direction of submerged marine debris for improvement of port environment in Korea. *Open Geosciences*, **2022**, 14, 443-452	1.3	0
37	Catalytic pyrolysis of chicken manure over various catalysts. *Fuel*, **2022**, 322, 124241	7.1	0

36	The effect of dispersant characteristics on the De-NOx efficiency of SCR catalyst. *Energy and Environment*,0958305X2211011	2.4	0
35	H□Production from Yellow Poplar Gasification Over Ni/Spent FCC. *Journal of Nanoscience and Nanotechnology*, **2019**, 19, 1133-1136	1.3	
34	Facile Synthesis and Characterization of Zinc Oxide Nanoparticle on Activated Carbon Using Liquid Phase Plasma Method. *Journal of Nanoscience and Nanotechnology*, **2018**, 18, 2181-2184	1.3	
33	Estrogenicity of Octyl Glucoside Synthesized by Direct Glucosidation as Non-Endocrine Disruptive Surfactant. *Journal of Nanoscience and Nanotechnology*, **2018**, 18, 1478-1481	1.3	
32	Precipitation of Nickel Oxide on TiO□Photocatalysts for Enhanced Visible Degradation Activity. *Journal of Nanoscience and Nanotechnology*, **2018**, 18, 1279-1282	1.3	
31	Characterization of Pt-Based Catalyst by Consecutive Experiments of Toluene Oxidation. *Journal of Nanoscience and Nanotechnology*, **2018**, 18, 1487-1491	1.3	
30	2-Butanol Dehydration over Highly Dispersed Molybdenum Oxide/MCM-41 Catalysts. *Bulletin of the Korean Chemical Society*, **2015**, 36, 1974-1979	1.2	
29	Effects of Acid Characteristics of Nanoporous MCM-48 on the Pyrolysis Product Distribution of Waste Pepper Stem. *Journal of Nanomaterials*, **2014**, 2014, 1-5	3.2	
28	Catalytic pyrolysis of waste mandarin over nanoporous materials. *Journal of Nanoscience and Nanotechnology*, **2013**, 13, 718-21	1.3	
27	Relative impacts of sintering and condensational obliteration on nanoparticle structure. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 7467-70	1.3	
26	Application of Ferrierite Catalyst to Polyolefin Degradation. *Studies in Surface Science and Catalysis*, **2006**, 159, 317-320	1.8	
25	Catalytic degradation of high density polyethylene over post grafted MCM-41 catalyst: kinetic study. *Studies in Surface Science and Catalysis*, **2006**, 159, 437-440	1.8	
24	Chemical Feedstock Recovery via the Pyrolysis of Electronically Heated Tobacco Wastes. *Sustainability*, **2021**, 13, 12856	3.6	
23	Coupling of nitrobenzene hydrogenation and 1, 4-butanediol dehydrogenation for the simultaneous synthesis of aniline and □butyrolactone over copper-based catalysts. *Korean Journal of Chemical Engineering*,1	2.8	
22	Atmospheric Hydrodeoxygenation of Anisole to Hydrocarbons Over Ni Supported on Mesoporous Silica. *Journal of Nanoscience and Nanotechnology*, **2020**, 20, 5734-5737	1.3	
21	Yellow Poplar Gasification Over Ni Silicate and Ni/Silica. *Journal of Nanoscience and Nanotechnology* , **2020**, 20, 5667-5670	1.3	
20	Catalytic Pyrolysis of Geodae-Uksae 1 Over Mesoporous Materials Produced from Zeolite HBeta. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 8260-8264	1.3	
19	Catalytic Decomposition of an Ionic Liquid Monopropellant Over Ir/Hexaaluminate Catalysts. *Journal of Nanoscience and Nanotechnology*, **2019**, 19, 7906-7910	1.3	

18	Fabrication of Molybdenum Oxide/Activated Carbon Using Liquid Phase Plasma Reaction and Its Electrochemical Performance. *Journal of Nanoscience and Nanotechnology*, **2020**, 20, 5579-5582	1.3
17	Hydrocarbons Production from m-Cresol as a Lignin Model Compound Over Nickel Silicate Catalysts. *Journal of Nanoscience and Nanotechnology*, **2020**, 20, 5738-5741	1.3
16	Catalytic pyrolysis of Japanese larch using spent HZSM-5 **2011**, 27, 73	
15	Exploiting starfish in pyrolysis for the enhanced generation of syngas and CO2-looping agent. *Journal of Cleaner Production*, **2020**, 276, 123228	10.3
14	Conversion of Multicyclic Hydrocarbons to Mono-Aromatic Hydrocarbons Over CoMo/Zeolite Socony Mobil-5 Catalysts. *Journal of Nanoscience and Nanotechnology*, **2021**, 21, 3819-3823	1.3
13	The Use of Low Cost Nanoporous Catalysts on the Catalytic Pyrolysis of Polyethylene Terephthalate. *Journal of Nanoscience and Nanotechnology*, **2021**, 21, 4121-4124	1.3
12	Catalytic Performance of Supported Bimetallic Catalysts for Complete Oxidation of Toluene. *Journal of Nanoscience and Nanotechnology*, **2021**, 21, 4060-4066	1.3
11	Emulsification of Catalytic Pyrolysis Oil from Nanoporous Zeolite Socony Mobil-5 with Diesel Using a Range of Emulsifiers in an Ultrasonicator. *Journal of Nanoscience and Nanotechnology*, **2021**, 21, 3955-3959	1.3
10	Catalytic Pyrolysis of Waste Root Over Al-MCM-41. *Journal of Nanoscience and Nanotechnology*, **2021**, 21, 4081-4084	1.3
9	Catalytic Pyrolysis of Waste Lignin Over Desilicated Beta. *Journal of Nanoscience and Nanotechnology*, **2019**, 19, 1074-1077	1.3
8	Performance of platinum doping on spent alkaline battery-based catalyst for complete oxidation of o-xylene. *Environmental Science and Pollution Research*, **2021**, 28, 24552-24557	5.1
7	Effect of calcination temperature on properties of waste alkaline battery-based catalysts for deep oxidation of toluene and o-xylene. *Energy and Environment*, **2021**, 32, 367-379	2.4
6	Kinetic Analysis for the Catalytic Pyrolysis of Wood Plastic Composite Over Al-MCM-41. *Journal of Nanoscience and Nanotechnology*, **2021**, 21, 3872-3876	1.3
5	Catalytic Pyrolysis of Seawater Aged Polypropylene Over HZSM-5, HY, and Al-MCM-41. *Journal of Nanoscience and Nanotechnology*, **2021**, 21, 3971-3974	1.3
4	Hydrogenation of Ethylbenzene Over Ru/-Al□□Catalyst in Trickle-Bed Reactor. *Journal of Nanoscience and Nanotechnology*, **2021**, 21, 4116-4120	1.3
3	Reaction Characteristics of NOx and N2O in Selective Non-Catalytic Reduction Using Various Reducing Agents and Additives. *Atmosphere*, **2021**, 12, 1175	2.7
2	Hydrolysis Reaction and Amorphization of Ce-Ti Oxide Catalysts During Synthesis. *Journal of Nanoscience and Nanotechnology*, **2021**, 21, 4931-4935	1.3
1	Ultrasound process-enhanced removal of the toxic disinfection by-product bromate from water by aluminum: A comparative study.. *Water Environment Research*, **2022**, 94, e10720	2.8